Please add the following after the title:

"CROSS-REFERENCE TO RELATED APPLICATION

The present invention is related to co-pending application serial no. 09/205,001 entitled "SEMICONDUCTOR MOUNTING APPARATUS WITH A CHIP GRIPPER TRAVELING BACK AND FORTH", filed on December 2, 1998, in the name of Samuel Schindler", which claimed priority based on Swiss application no. 1997 2807/97, filed December 7, 1997.

In the Claims:

Please cancel claims 1-14 without prejudice.

Please add new claims 15-36 as follows.

15. (New) An apparatus used as a component of a die bonder for placing a semiconductor chip on a substrate, comprising:

a first pivoted lever seated at one end on a first shaft, said first shaft mounted equidistantly between a first location and a second location, said first pivoted lever having a second shaft seated at another end;

a drive coupled to said first shaft for pivoting said first pivoted lever in alternating pivoting directions through an angle of pivoting between a first end position in which said first pivoted lever is directed toward said first location and a second end position in which said first pivoted lever is directed toward said second location;

a second pivoted lever seated at one end on said second shaft, a sum of lengths of said first and second pivoted levers equalling a distance from said first shaft to said first

location or said second location, said first and second pivoted levers pivoting in horizontal planes;

a drive mechanism coupled to said second pivoted lever for rotating said second pivoted lever in an opposite pivoting direction with respect to said first pivoted lever; and

a semiconductor chip gripper seated at an end of said second pivoted lever.

16. (New) The apparatus according to claim 15 wherein the angle of pivoting of said first pivoted lever between said first and said second end position equals 120°.

17. (New) The apparatus according to claim 15 wherein said drive mechanism comprises:

a first fixed toothed wheel coaxial to said first shaft;

a second toothed wheel fixed and coaxial to said second shaft; and

a toothed belt looped around and engaging said first and second toothed wheels.

18. (New) The apparatus according to claim 17 wherein said toothed belt is an intermediate wheel.

19. (New) The apparatus according to claim 16 wherein said drive mechanism comprises:

a first fixed toothed wheel coaxial to said first shaft;

a second toothed wheel fixed and coaxial to said second shaft; and

a toothed belt looped around and engaging said first and second toothed wheels.

20. (New) The apparatus according to claim 19 wherein said toothed belt is an intermediate wheel.

21. (New) The apparatus according to claim 17 wherein a gear ratio of said first fixed toothed wheel and said second toothed wheel equals three.

22. (New) The apparatus according to claim 18 wherein a gear ratio of said first fixed toothed wheel and said second toothed wheel equals three.

23. (New) The apparatus according to claim 19 wherein a gear ratio of said first fixed toothed wheel and said second toothed wheel equals three.

24 (New) The apparatus according to claim 20 wherein a gear ratio of said first fixed toothed wheel and said second toothed wheel equals three.

25 (New) The apparatus according to claim 15 wherein said chip gripper is rigidly connected to said end of said second pivoted lever.

26 (New) The apparatus according to claim 15 wherein at said first and said second end position delimiter means for said second pivoted lever are arranged laterally to a direction of movement of said chip gripper.

27 (New) The apparatus according to claim 16 wherein at said first and said second end position delimiter means for said second pivoted lever are arranged laterally to a direction of movement of said chip gripper.

28 (New) The apparatus according to claim 17 wherein at said first and said second end position delimiter means for said second pivoted lever are arranged laterally to a direction of movement of said chip gripper.

29. (New) The apparatus according to claim 18 wherein at said first and said second end position delimiter means for said second pivoted lever are arranged laterally to a direction of movement of said chip gripper.

30. (New) The apparatus according to claim 19 wherein at said first and said second end position delimiter means for said second pivoted lever are arranged laterally to a direction of movement of said chip gripper.

31. (New) The apparatus according to claim 20 wherein at said first and said second end position delimiter means for said second pivoted lever are arranged laterally to a direction of movement of said chip gripper.

32. (New) The apparatus according to claim 21 wherein at said first and said second end position delimiter means for said second pivoted lever are arranged laterally to a direction of movement of said chip gripper.

33. (New) The apparatus according to claim 22 wherein at said first and said second end position delimiter means for said second pivoted lever are arranged laterally to a direction of movement of said chip gripper.

34. (New) The apparatus according to claim 23 wherein at said first and said second end position delimiter means for said second pivoted lever are arranged laterally to a direction of movement of said chip gripper.

35. (New) The apparatus according to claim 24 wherein at said first and said second end position delimiter means for said second pivoted lever are arranged laterally to a direction of movement of said chip gripper.

36. (New) The apparatus according to claim 25 wherein at said first and said second end position delimiter means for said second pivoted lever are arranged laterally to a direction of movement of said chip gripper.